



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/074,193	02/12/2002	Hui Shi	PW 0249741/P12833	4362
7590	04/21/2005		EXAMINER	
PILLSBURY WINTHROP LLP			KIM, KEVIN	
Suite 2800				
725 South Figueroa Street			ART UNIT	PAPER NUMBER
Los Angeles, CA 90017-5406			2634	

DATE MAILED: 04/21/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/074,193	SHI ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Kevin Y Kim	2634	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 2 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

1)  Responsive to communication(s) filed on 2-12,8-13-2002.

2a)  This action is **FINAL**.                            2b)  This action is non-final.

3)  Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## **Disposition of Claims**

4)  Claim(s) 1-29 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

5)  Claim(s) \_\_\_\_\_ is/are allowed.

6)  Claim(s) \_\_\_\_\_ is/are rejected.

7)  Claim(s) 1-29 is/are objected to.

8)  Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

9)  The specification is objected to by the Examiner.

10)  The drawing(s) filed on 12 February 2002 is/are: a)  accepted or b)  objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)  The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)  Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a)  All    b)  Some \* c)  None of:  
1.  Certified copies of the priority documents have been received.  
2.  Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3.  Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1)  Notice of References Cited (PTO-892)  
2)  Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3)  Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 2/12/02.

4)  Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_ .

5)  Notice of Informal Patent Application (PTO-152)

6)  Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Claim Objections***

1. Claims 1-29 are objected to because of the following informalities:

#### **Claim 1.**

1) on line 2, change of “for” to “having” would better described the claimed invention.  
2) on line 5, change of “the input signal” to “the delayed input signal” enhances the readability since it refers back to “a delayed input signal” rather than “an input signal.”  
3) on line 11, “to the delayed input signal and” is missing after “adjustment sizes” because the provision of the adjustment sizes to the delayed input signal as well as to the two intermediate output signal is essential to “produce an equalized output signal” recited on lines 11-12.

#### **Claim 3.**

1) on line 5, change of “the input signal” to “the delayed input signal” enhances the readability since it refers back to “a delayed input signal” rather than “an input signal.”  
2) on line 11, “to the delayed input signal and” is missing after “adjustment sizes” because the provision of the adjustment sizes to the delayed input signal as well as to the two intermediate output signal 1 is essential to “produce an equalized output signal” recited on lines 11-12.

#### **Claim 8.**

On line 5, change of “the input signal” to “the delayed input signal” would enhance the readability since it refers back to “a delayed input signal” rather than “an input signal.”

#### **Claim 17.**

On line 11, change “the channel frequency response” to “a channel frequency response” to avoid the lack of antecedent basis.

**Claim 22.**

On lines 2-3, change of “the input signal” to “a delayed input signal” would enhance the readability since adjustment is made to a delayed input signal and not to an input signal itself.

**Claim 25.**

On line 7, “to the delayed input signal and” is missing after “adjustment sizes” because the provision of the adjustment sizes to the delayed input signal as well as to the two intermediate output signal is essential in order to “produce an equalized output signal” recited on lines 8-9.

The remaining claims are objected as they included the objected-to subject matter of respective base claims.

Appropriate correction is required.

2. Claims 1-29 would be allowable if rewritten or amended to overcome the objection (s) set forth above in this Office action.

3. The following is a statement of reasons for the indication of allowable subject matter: No prior art has been found to teach or suggest a transmit equalizer that generates two “intermediate output signals” and a delayed input signal wherein equalization step sizes are selectively applied to the signals to produce an equalized output signal compensated for a channel frequency response.

***Conclusion***

4. This application is in condition for allowance except for the following formal matters:

See the above paragraphs listing formal matters in connection with the language of the claims.

Prosecution on the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

A shortened statutory period for reply to this action is set to expire **TWO MONTHS** from the mailing date of this letter.

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Tang et al (US 6,570,406) discloses a pre-emphasis equalization.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kevin Y Kim whose telephone number is 571-272-3039. The examiner can normally be reached on 8AM --5PM M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen Chin can be reached on 571-272-3056. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

kvk

*Chieh M. Fan*  
CHIEH M. FAN  
PRIMARY EXAMINER